Optics and Lasers in Engineering **18** (1993) 389–391

CONTENTS OF VOLUME 18

Number 1

Laser Modification of Metal Surfaces 1
D. A. SCOTT, M. BRANDT, B. DORIEN-BROWN, B. VALENTINE & P. DE (Australia)

A Fibre Optic Reflectometer 15
R. SILVENNOINEN, K.-E. PEIPONEN, K. IKONEN (Finland), T. ASAKURA (Japan), J. LUOSTARINEN & CONG GU (Finland)

On the Sensitivity of Coherent Gradient Sensing: Part II—An Experimental Investigation of Accuracy in Fracture Mechanics Applications 25
HUGH A. BRUCK & ARES J. ROSAKIS (USA)

Highly Sensitive Interferometric System for Optical Surface Contouring 53
E. SIMOVA, S. ZHIVKOVA, G. STOILOV & M. MITEVA (Bulgaria)

Research Note
Simultaneous Reconstruction from Several Holograms Using One Laser Beam . 63
C. S. VIKRAM (USA)

Book Reviews 67

Announcements 71

Calendar 75

Cumulative Index of Special Issues 77

Number 2

Photoelasticity Stress Analysis Using Carrier Fringe and FFT Techniques 79
C. QUAN, P. J. BRYANSTON-CROSS & T. R. JUDGE (UK)

Talbot Effect and its Application in Measurement of In-Plane Strain 109
L. WANG (Germany) & D. YUN (China)

Model of Holographic Interferometry of Anodic Dissolution of Metals in Aqueous Solution 115
K. HABIB (Kuwait)

Optical-Fiber Strain Sensor Using Combined Interference and Polarimetric Technique 121
N. NARENDRAN, S. LETCHER & A. SHUKLA (USA)

High-Frequency Pulsed Laser Diode Application in Multi-Component Laser Doppler Anemometry 135
D. DOPHEIDE, M. RINKER & V. STRUNCK (Germany)

Optics and Lasers in Engineering **(18)** (1993)—© 1993 Elsevier Science Publishers Ltd, England. Printed in Northern Ireland

Book Reviews 145

Announcements 149

Calendar 151

Number 3

Special Issue on Grating and Moiré Methods I

Guest Editorial 155

Numerical Spectral Analysis of a Grid: Application to Strain Measurements . . 159
J. C. DUPRÉ, F. BRÉMAND & A. LAGARDE (France)

The Photonical, Pure Grid Method 173
P. J. SEVENHUIJSEN (The Netherlands)

Automated Analysis of 3-D Shape and Surface Strain Distributions of a Moving Object Using Stereo Vision 195
Y. MORIMOTO & M. FUJIGAKI (Japan)

Computer Aided Moiré Methods 213
A. ASUNDI (Hong Kong)

Application of Moiré Method to the Study of Plastic Deformation Processes . . 239
B. XIE, Q. X. CAO & Q. X. MA (China)

Book Reviews 259

Calendar 263

Number 4

Quantitative Analysis of Holographic Particle Data 267
P. J. BRYANSTON-CROSS, C. QUAN, M. FUNES-GALLANZI & T. R. JUDGE (UK)

Fringe Skeleton Extraction Using Adaptive Refining 281
Z. HUANG (Sweden)

Influence of Relative Refractive Index on the Efficiency of Total Internal Reflection Diffraction Gratings. Part I. s.-Polarization 297
S. SAINOV (Bulgaria), B. CHERNOV (Russia) & N. DUSHKINA (Bulgaria)

Automatic Young's Fringe Analysis in the Source Image Plane 307
V. SHAPIRO, D. GOUTEV & V. KAVARDJIKOV (Bulgaria)

Announcements 325

Calendar 327

Number 5

Development of a Laser-Based Raman Scattering System for Identifying and Quantifying Major Gas Species 331
S. D. ALARURI (USA) & S. ABU-ZANT (Kuwait)

Lasers and Laser Applications in the 1990s: A Survey of Laser Safety Schemes . 339
L. H. VASSIE, J. R. TYRER, B. SOUFI & A. A. CLARKE (UK)

Focusing for Laser Hole Drilling 349
A. GÖRÜR, C. ÇIFTLIKLI & B. S. YILBAŞ (Turkey)

In-Situ Laser Material Process Monitoring Using a Cladding Power Detection Technique 371
D. SU, I. NORRIS, C. PETERS, D. R. HALL & D. J. C. JONES (UK)

Book Reviews 377

Announcements 383

Calendar 385